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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,131	05/23/2001	Naoyuki Kadoya	MTS-3252US	1413

7590 10/14/2003  
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EXAMINER
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AGUIRRECHEA, JAYDI A

ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 10/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/863,131

Applicant(s)

KADOYA ET AL.

Examiner

Jaydi A. Aguirrechea

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(d).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 5, 6 and 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5, 6 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 22 September 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Drawings***

1. The drawings were received on 9/22/03. These drawings are accepted.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishiyama, et al. (JP 2000050584).

Nishiyama, et al. disclose a motor (Figure 8) comprising:

a rotor, comprising a plurality of first rotator portions (32), each having a permanent magnet (34), and  
one second rotator portions (33), each having magnetic saliency (Paragraph 0035 of the translation provided by applicants), the rotator portions being separated in a direction of a longitudinal axis of a rotating shaft; and  
a stator which generates a magnetic field for driving said rotor when electric current is supplied.

4. With regards to claim 2, Nishiyama, et al. disclose the first rotator portion and the second rotator portion not being arranged adjacent to each other.
5. With regards to claim 5, Nishiyama, et al. disclose the claimed invention wherein said first rotator portion and said second rotator portion are arranged adjacent to each other in such a manner that current phases for generating maximum torque for both the first rotator portion and

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the second rotator portion are in electrical phase with one another.

6. With regards to claim 6, Nishiyama, et al. disclose the claimed invention wherein the stator has a stator winding.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 7/1 – 7/2, 7/5-7/6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishiyama, et al. in view of Mildice ( US 6252331).

Nishiyama, et al. teach the claimed invention as disclosed above. However, it fails to disclose an electric vehicle motor using a fuel cell as the power supply.

Mildice teaches the use of an electric vehicle drive system (motor) connected to a DC power source that could be a fuel cell.

It would have been obvious to one skilled in the art at the time the invention was made to use the fuel cell power supply in an electric vehicle as disclosed by Mildice in the motor assembly disclosed by Nishiyama, et al.

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishiyama in view of Reiter, Jr. (US5191256).

Nishiyama discloses substantially the claimed invention. However, it fails to disclose the rotor portion having notches.

Reiter Jr. teach a rotor structure with notches for the purpose of providing a low cost, efficient and easy to assemble rotor.

It would have been obvious to one skilled in the art at the time the invention was made to use the rotor structure with notches as disclosed by Reiter Jr. on the motor structure disclosed by Nishiyama for the purpose of providing a low cost, efficient and easy to assemble rotor.

***Response to Arguments***

10. Applicant's arguments filed on 9/30/03 have been fully considered but they are not persuasive. The Examiner notes that paragraph 0035, description of figure 8, of Nishiyama (JP200050584-translation provided by the applicants) discloses the rotor portions being magnetically coupled.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaydi A. Aguirrechea whose telephone number is 703-305-2277. The examiner can normally be reached on M-Th 9-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 703-308-1371. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

  
JAA  
10/3/03

